

Automated Laboratory Inventory Management System (Project ALIMS)

Project Description:

Target Department: PGH Medical Research Laboratory

Format: Website Desktop/Laptop compatible (for live updating)

Software Methodology: Agile Methodology

Laboratories: Pathology, Immunology, Microbiology

User accounts: Admin1, Admin2, Admin3, Admin 4 User

Admin 1 - 4:

Main Tabs: Pathology, Immunology, Microbiology, Purchase Order, Stock level report, Disposition, Accounts

User:

Main Tabs: Pathology, Immunology, Microbiology, Purchase Order, Stock level report, Disposition, Account

* Note - Users must only have access with the Account tab listed below.

Account Tab: (User)

Update: (Update data for own user)

Update Name, Designation, Laboratory

Last Name, First Name, MI.

Designation: Medical Technologist, Researcher, Lab Manager, Student, Technician

Laboratory: Pathology/Immunology/Microbiology

Save

Update Username, Password

Username: (Min 8 characters, Max 15 alphanumeric)

Password: (Min 8 characters, Max 15 characters must consist of letters, numbers, special characters)

Re-enter Password: (same value as Password)

Save

* Note - Admin 1 (Access to overall) - Authorization to access Admins and Users.
Admin 2, 3, & 4 must only have access with the Accounts tab listed below.

Accounts Tab: (Admin)

Create, Update, Delete, View

Create: (Create data for new user)

Informations:

Last Name, First Name, MI. (i.e. Mallari, Enrico Miguel M.)

Designation: Medical Technologist, Researcher, Lab Manager, Student, Technician

Laboratory: Pathology/Immunology/Microbiology

Username: (Min 8 characters, Max 15 alphanumeric) (i.e. TheMechanic01)

Password: (Min 8 characters, Max 15 characters must consist of letters, numbers, special characters)

Re-enter Password: (same value as Password)

Save

Update: (Update data for existing user)

Last Name, First Name, MI.

Designation: Medical Technologist, Researcher, Lab Manager, Student, Technician

Laboratory: Pathology/Immunology/Microbiology

Username: (Min 8 characters, Max 15 alphanumeric)

Password: (Min 8 characters, Max 15 characters must consist of letters, numbers, special characters)

Re-enter Password: (same value as Password)

Enter

Option: Reset password

Delete: (Delete data for existing user)

Search bar users to delete

Delete button to delete user information and access

View: (View data for existing user)

Search bar users to view (Must have option to view per user and all users)

Output Name and Laboratory

* Note - All forms and reports must have a print function.

Materials category code:

Glasswares, Equipment, Plasticwares, Chemical reagents, Biological samples, PPE,

Department : Pathology; Immunology; Microbiology

> Chemical Inventory

> Biological Inventory

> General Supplies

Purchase Order

>IMN0001

>MIC0001

>PTH0001

Stock Level Report

>Pathology

>Immunology

>Microbiology

>Summary

Floor Mapping

*(To follow)

Disposition Report**Calibration Report****

Material Incident Report**

Inventory Count Forms

Chemical Inventory Form

Date: 12/31/2024	Lab Name: MRL - Immunology	Personnel: EMM
------------------	----------------------------	----------------

Item Name	Item Code	Quantity	Unit	Location	Expiry Date	Supplier	Cost	Notes
Acetone	CH001	2	liters	Chemical Shelf 1	10/2024	ChemLab Supplies	PHP 5,000.00	Flammable, store in cool place
Sodium Chloride	CH002	4	kg	Shelf A	6/2025	Lab Co. Supplies	PHP 11,200.00	General Lab use

Reagent dispense form

Reagent Name						
Date	Total no. of containers	Lot no.	Quantity dispensed	Remaining Quantity	Remarks	Analyst
				(This will be automatically deducted)		

--	--	--	--	--	--	--

Equipment Use Form

Biological Inventory Form

Date: 12/31/2024	Lab Name: MRL - Pathology	Personnel: EMM
------------------	---------------------------	----------------

Item Name	Item Code	Quantity	Unit	Location	Expiry Date	Supplier	Cost	Notes
Agar Plates	BI001	50	Plates	Fridge - Drawer 2	12/2024	SafetyLab Inc.	PHP 13,000.00	Sterile, handle carefully
E. Coli Culture	BI002	30	Vials	Freezer Shelf 1	01/2025	LabEquip Solutions	PHP 23,456.02	Requires -80°C storage

General Lab Supplies Inventory Form

Date: 12/31/2024	Lab Name: MRL - Molecular	Personnel: EMM
------------------	---------------------------	----------------

Item Name	Item Code	Quantity	Unit	Location	Supplier	Cost	Notes
Glass Beakers	SU001	500	pairs	Supply Cabinet 1	SafetyLab Inc.	PHP 7,000.00	Latex, size M

Pipette Tips	SU001	1000	tips	Shelf C	LabEquip Solutions	PHP 9,876.00	Sterile, 10µL capacity
--------------	-------	------	------	---------	--------------------	--------------	------------------------

Purchase Order Forms

PO No.	Description	Quantity	Unit Price (PHP)	Total Price (PHP)
IMN0001	Microscope, Model XYZ, 200x magnification	2	30,000.00	60,000.00
	Centrifuge, Model ABC	1	55,000.00	55,000.00
	Glass Beakers, 100mL, pack of 10	5	5,000.00	25,000.00

Laboratory Purchase Order

Purchase Order No: IMN - 0001

Date: 12/31/2024

Status: Submitted, Procurement Office, Accounting Office, Delivered, Canceled

Supplier Information:

Supplier Name: [Supplier Name]

Supplier Address: [Supplier Address]

Phone Number: [Supplier Contact Number]

Email: [Supplier Email Address]

Contact Person: [Contact Person's Name]

Buyer Information:

Laboratory Name: [Laboratory Name]
Laboratory Address: [Laboratory Address]
Phone Number: [Laboratory Contact Number]
Email: [Laboratory Email Address]
Contact Person: [Contact Person's Name]

			Subtotal:	140,000.00
			Tax (10%):	14,000.00
			Shipping Cost:	5,000.00
			Grand Total:	159,000.00

Stock Level Report

Item No.	Item Description	Stock on Hand	Minimum Stock Level	Maximum Stock Level	Status	Action Required
001	Microscope, Model XYZ	5	2	10	Sufficient, Below Reorder Level, Critical Stockout	None, Reorder Immediately, Urgent Order Needed, Reorder Soon, Monitor Usage
002	Glass Beakers, 1000 mL	50	5	100	Sufficient, Below Reorder Level, Critical Stockout	None, Reorder Immediately, Urgent Order

						Needed, Reorder Soon, Monitor Usage

Disposition Report

Item No.	Item Description	Quantity	Reason for Disposition	Disposition Method	Date of Disposition	Dispositioned by	Comments
0001	Ethanol, 95%, 500 mL	2 bottles	Expired	Hazardous Waste Disposal	09/01/2024	Name	Properly labeled, disposed via approved vendor
0002	Centrifuge, Model ABC	1 unit	Malfunctioned , Unrepairable	Decommissio n and Recycle	08/30/2024	Name	Decommissio ned, parts recycled
0003	Safety Goggles, Anti-Fog	5 pairs	Damaged	General Waste Disposal	08/28/2024	Name	Disposed of according to lab protocol

CALIBRATION OF EQUIPMENT FORM

-depends on the available equipment

INCIDENT FORM

Date	Time	Nature of incident	Qty of Materials	Materials involved	Brand	Remarks	Involved individuals	Attache documentation

LAB MATERIALS BORROW FORM

Date borrowed	Details of borrowed equipment	Qty	Unit	Borrower details	Department	Time borrowed	Date returned	Time returned	Remarks	Damage materials

Date borrowed in

PROJECT WORKFLOW

DRAFT SYSTEM WORKFLOW

DATA UPDATING > USER CONTROL > FORMS (ACCESSIBLE TO ALL) > REPORT GENERATING > PURCHASING
 (input of info) (access by personnel)